

## California Water Conditions Synopsis for April 2003

A series of storms during April erased the deficit from the dry winter, and the snowpack reached its highest level this year in early May. The accumulated snow water content is peaking over a month later than average, in contrast to early peaks in many recent years. Snowmelt runoff has been delayed, but the late melt will keep runoff in mountain rivers near or above average through June. Water supplies are much improved in all regions of the state.

**Precipitation** during April was 230 percent of average statewide, far above average in all regions of the state except the Colorado Desert. Precipitation during the month in the northern Sierra was 270 percent of average, the third wettest April in 80 years of record, exceeded only in 1948 and 1963. The cumulative statewide precipitation since October is 110 percent of average compared to 80 percent one year ago.

**Snowpack** water content increased 15 percent overall during April to reach 80 percent of the historical April 1 average. Much below average temperatures combined with the wet weather to cause the third largest April increase in statewide snowpack in the last 50 years. The largest snow accumulations are in the North Coast & Lahontan regions and at high elevations. Last year the snowpack peaked at 95 percent of average on April 1 and melted very quickly.

**Runoff** during April was 115 percent of average statewide, and 170 percent of average in the North Coast region. Monitor stages were reached at several spots in northern California, and water flowed over the weirs into the Sacramento River bypass system at the end of the month. In contrast, southern Sierra runoff was only half of average due to a delay in the onset of snowmelt. Cumulative statewide runoff for the water year is 100 percent of average, compared to 80 percent at this time last year. There is a pronounced gradient from above average in the northwest to below average in the remainder of California.

Forecasts of April through July runoff have been increased about 30 percent due to the unusually wet April weather. The statewide forecasts total about 100 percent of average assuming normal weather for the remainder of the season. The spring runoff forecasts are highest in the far northern basins. Water year forecasts have also been raised about 15 percent to 95 percent of average. As of May 1, the forecasted Sacramento River Index (SRI) was 99 percent of average, the Sacramento Valley Index (40-30-30 SVI) year type was 'above normal', and the San Joaquin Valley Index (60-20-20 SJI) year type was 'below normal'.

**Reservoir** storage increased at greater than an average pace during April. Overall storage was nearly 105 percent of average on May 1, 4 percent more than last year. Most northern reservoirs are fairly full or at flood control limits.